



Building 462
P.O. Box 5000
Upton, NY 11973-5000
Phone 631 344-5186
Fax 631 344-7776
Dorsch@bnl.gov

managed by Brookhaven Science Associates
for the U.S. Department of Energy

Mr. Brian Jankauskas
New York State Dept. of Environmental Conservation
Division of Environmental Remediation
625 Broadway – 12th Floor
New York, New York 12233-7051

August 11, 2020

Ms. Sharon Hartzell
Federal Facilities Section
U.S. EPA – Region II
290 Broadway – 18th Floor
New York, New York 10007-1866

Dear Mr. Jankauskas and Ms. Hartzell:

**SUBJECT: BROOKHAVEN NATIONAL LABORATORY (BNL) INTERAGENCY
AGREEMENT (IAG) – MONTHLY REPORT FOR JULY 2020**

In accordance with the Interagency Agreement (IAG) for Brookhaven National Laboratory (BNL), enclosed is the Monthly Report for July 2020 covering the Long-term Stewardship (LTS) areas listed below:

- Brookhaven Graphite Research Reactor (BGRR) Surveillance and Maintenance
- High Flux Beam Reactor (HFBR), including the Waste Loading Area (WLA) Surveillance and Maintenance
- Soil and Water Remediation

If you have any questions, please call Gerald Granzen at (631) 344-4089.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Dorsch", with a stylized flourish at the end.

William Dorsch, Manager
Groundwater Protection Group

Enclosure:

As stated

cc: w/encl.

P. Armani, NYSDEC
C. Costello, NYSDOH
S. Karpinski, NYSDOH
D. O'Hehir, NYSDOH
T. Papura, NYSDEC
A. Rapijko, SCDHS
J. Wanlass, SCDHS
T. Rice, NYSDEC
M. Soucie, NYSDOH

J. Carter, BHSO
M. Dikeakos, BHSO
R. Gordon, BHSO
G. Granzen, BHSO
C. Kwok, BHSO
C. Polanish, BHSO
J. Remien, BSA
S. Coleman, BSA
R. Howe, BSA
D. Paquette, BSA
V. Racaniello, BSA
File: GWER 17.1.20

**Brookhaven National Laboratory
Interagency Agreement (IAG) Monthly Report
July 2020
Long Term Stewardship (LTS) Activities**

**BROOKHAVEN GRAPHITE RESEARCH REACTOR (BGRR) SURVEILLANCE AND
MAINTENANCE**

Current Month Technical Performance Analysis

Accomplishments and/or Technical Achievements

- Quarterly inspection of the high bay and former offices was held 7/23/20. No significant issues were identified.

Highlights of any changes to objectives and description of any changes in technical approach

- None.

Key Issues

- None.

Planned Actions for the Next 90 Days

- Continue S&M activities.
- Annual below ground ducts inspection is scheduled for 8/5/20.

**HIGH FLUX BEAM REACTOR (HFBR) INCLUDING, STACK, GROUNDS, AND WASTE
LOADING AREA (WLA) SURVEILLANCE AND MAINTENANCE**

Current Month Technical Performance Analysis

Accomplishments and/or Technical Achievements

- BSA and BHSO participated in the weekly stack demolition planning teleconferences with the Army Corps of Engineers (USACE) and DOE's Office of Environmental Management (EM).
- Received NYSDEC/NYSDOH final comments on the stack Demolition Plan and Community Air Monitoring Plan (CAMP) 7/2/20.
- Submitted responses to comments on the stack demolition Quality Assurance Project Plan (QAPP), Field Sampling Plan (including the Final Status Survey Plan), Demolition Plan and the CAMP to NYSDEC 7/27/20.
- The demolition contractor collected pre-mobilization internal and external stack core characterization samples 7/8/20 and 7/9/20.
- A BNL informational session for employees on the status of the stack demolition was held 7/23/20.

- DOE-EM briefed the regulators on the status of the stack demolition during the 7/9/20 IAG monthly teleconference.
- Quarterly inspection of the confinement dome was held 7/29/20. There were several minor deficiencies noted requiring follow-up.
- The stack drain tank water level is maintained below 250 gallons and checked weekly.

Highlights of any changes to objectives and description of any changes in technical approach

- None.

Key Issues

- Delays to the stack demolition mobilization which will impact the end of September demolition completion milestone.

Planned Actions for the Next 90 Days

- Continue S&M activities.
- Following NYSDEC concurrence on the responses to comments, submit the final stack demolition QAPP, Field Sampling Plan, Demolition Plan and CAMP to the regulators.
- The demolition contractor to mobilize for stack exterior coating abatement in early August. Abatement is scheduled to start 8/17/20.

SOIL AND WATER REMEDIATION

Current Month Technical Performance Analysis

Accomplishments and/or Technical Achievements:

- The IAG monthly teleconference was held 7/9/20 and included updates on the HFBR stack demolition and groundwater related projects.
- Briefed the regulators on the highlights and recommendations of the 2019 Groundwater Status Report 7/30/20.
- Start-up testing of the North Street East ethylene dibromide (EDB) extraction wells and treatment system continued, including performance testing.
- Continued PFAS/1,4-dioxane Phase 4 sampling of on-site and off-site monitoring wells and off-site extraction wells. Approximately 98% of the planned wells have been sampled.
- Contractor initiated installation of Phase 5 PFAS temporary wells (Geoprobes) starting in the area downgradient of the current firehouse 7/13/20.
- Completed installation of temporary wells to monitor for Sr-90 downgradient of the former Hazardous Waste Management Facility source.
- BHSO submitted the updated North Street/North Street East Groundwater Treatment System Operation and Maintenance Manual to the regulators.
- The BGRR Sr-90 Groundwater Treatment System and the Building 96 Groundwater Treatment System are shut down due to storm related electrical issues. The systems will be restarted following receipt of several components needed for the repair.
- Well drilling contractor replaced the pump that had failed at extraction well RW-1 at the Middle Road Groundwater Treatment System.

Highlights of any changes to objectives and description of any changes in technical approach

- The New York State Public Health and Health Planning Council approved the proposed drinking water standards for 1,4-dioxane, PFOA and PFOS on 7/30/20. The drinking water standards are expected to be published in the New York State Register within 90 days.

Key Issues

- The Laboratory began Phase 2 operations 7/6/20. The Groundwater Protection Group (GPG) continued a gradual increase of staff working on-site as field activities continue. Monitoring well and treatment system sampling is continuing. All other GPG staff continue to work remotely.

Planned Actions for the Next 90 Days

- The Laboratory and GPG will continue Phase 2 operations.
- The monthly IAG teleconference is scheduled for 8/6/20 and will include updates on Building 650 demolition, HFBR stack demolition and Phase 5 PFAS characterization.
- Regulators to provide comments/concurrence on the 2019 Groundwater Status Report.
- Continue start-up testing of the North Street East EDB treatment system.
- Continue installation of first two transects of Phase 5 PFAS temporary wells downgradient of the current firehouse. Temporary well installation activities will then shift to the former firehouse area during mid-August.
- Perform repairs to the roof of the Building 96 Treatment System RTW-1 well-house.
- Repair the wet well piping at the Middle Road/South Boundary/Western South Boundary treatment system.
- Repair and restart Western South Boundary extraction well WSB-3 and extraction well EW-3 at the OU III South Boundary.
- Inspection of the Peconic River PR-WC-06 cleanup area vegetation recovery by the NYSDEC Biologist is scheduled for 8/5/20.
- Submit the first quarter 2020 Groundwater Systems Operations Report to the regulators.
- A carbon change-out at the North Street East EDB Groundwater Treatment System is planned for 8/27/20.